

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Richard A. SCHUMACHER et al.

Serial No.: 10/622,833

Group Art Unit: Unassigned

Filed: July 21, 2003

Examiner: Unassigned

For: PHOSPHODIESTERASE 4 INHIBITORS, INCLUDING N-SUBSTITUTED ANILINE AND DIPHENYLAMINE ANALOGS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

Timing and Fees

- ☒ Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information disclosure statement is filed:
- ☐ within three months of the filing date of a national application other than a CPA under § 1.53(d);
 - ☐ within three months of the actual filing date of the national phase of a PCT application; OR
 - ☒ before the mailing of a first substantive office action (including after filing of an RCE).
- ☐ Under 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods specified in 37 C.F.R. § 1.97(b), but before the mailing date of:
- ☐ a final rejection under 37 C.F.R. 1.113;
 - ☐ termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR
 - ☐ a notice of allowance under 37 C.F.R. § 1.311; and

is accompanied by:

- ☐ the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR
 - ☐ a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).
- ☐ Under 37 C.F.R. § 1.97(d), this information disclosure statement is filed after the mailing date of the following actions which have not been withdrawn:
- ☐ a final action under 37 C.F.R. § 1.113;
 - ☐ termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P. § 609(B)(2); OR
 - ☐ a notice of allowance under 37 C.F.R. § 1.311;

AND is filed on or before payment of the issue fee; AND is accompanied by:

- ☐ the statement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of \$180.00 under 37 C.F.R. § 1.17(p).

Statements Under 37 C.F.R. 1.97(e)

- ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement.

Cited Materials

- ☐ Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. _____, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).
- ☐ Copies of materials listed but not attached were cited in an international search report dated _____.

☒ Copies of the materials listed are attached.

Non-English Language References

- ☐ An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).
- ☐ A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:

X = document of particular relevance when it is taken alone
Y = document of particular relevance when it is combined with another such document
A = document defining the general state of the art
O = non-written disclosure
P = intercalated document
T = document cited to understand the theory or principle underlying the invention
E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date
D = cited in the application
L = cited for another reason
& = publication of member of same patent family

- ☐ Translation of other relevant information on foreign search report

Other Information


The instant application is related to copending patent applications Serial No. 10/051,309, filed January 22, 2002, Serial No. 10/361,634 filed February 11, 2003, Serial No. 10/754,600, filed January 12, 2004, Serial No. 10/662,117, filed July 18, 2003, and Serial No. 10/715,819, filed November 19, 2003. Enclosed are copies of documents cited in said related applications.

Payment of Fees Due (If Any):

- ☐ A check for \$_____ covering the fee identified above is attached.
- ☐ Please charge to Deposit Account No. 13-3402 \$_____ for the fee identified above.

☒ The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,



Brian P. Heaney, Reg. No.; 32,542
Attorney/Agent for Applicants

MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Arlington Courthouse Plaza 1
2200 Clarendon Blvd. Suite 1400
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

Attorney Docket No.: MEMORY-28

Date: March 12, 2004

BPH/rrt

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	10/622,833
Filing Date	July 21, 2003
First Named Inventor	Richard A. SCHUMACHER et al
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-28

U.S. PATENT DOCUMENTS

Examine Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		5,622,977		Warrellow et al.	04/22/1997	
		5,633,257		Warrellow et al.	05/27/1997	
		5,679,696		Fenton et al.	10/21/1997	
		5,693,659		Head et al.	12/02/1997	
		5,698,711		Palfreyman	12/16/1997	
		5,710,160		Guay et al.	01/20/1998	
		5,710,170		Guay et al.	01/20/1998	
		5,712,298		Amschler	01/27/1998	
		5,723,460		Warrellow et al.	03/03/1998	
		5,728,712		Montana et al.	03/17/1998	
		5,739,144		Warrellow et al.	04/14/1998	
		5,776,958		Warrellow et al.	07/07/1998	
		5,780,477		Head et al.	07/14/1998	
		5,780,478		Alexander et al.	07/14/1998	
		5,786,354		Warrellow et al.	07/28/1998	
		5,798,373		Warrellow et al.	08/25/1998	
		5,840,724		Fenton et al.	11/24/1998	
		5,849,770		Head et al.	12/15/1998	
		5,859,034		Warrellow et al.	01/12/1999	
		5,891,896		Warrellow et al.	04/06/1999	
		5,866,593		Warrellow et al.	02/02/1999	
		5,919,937		Lynch et al.	07/06/1999	
		5,935,978		Fenton et al.	08/10/1999	
		5,962,483		Warrellow et al.	10/05/1999	
		5,962,492		Warrellow et al.	10/05/1999	
		6,077,854		Warrellow et al.	06/20/2000	
		5,814,651		Duplantier et al	09/29/1998	
		6,255,326		Ashton et al.	07/03/2001	
		6,096,768		Ashton et al.	08/01/2000	
		6,162,830		Connor et al.	12/19/2000	
		6,180,650		Frenette et al.	01/30/2001	
		6,200,993		Cote et al.	03/13/2001	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 5

Complete if Known

Application Number	10/622,833
Filing Date	July 21, 2003
First Named Inventor	Richard A. SCHUMACHER et al
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-28

U.S. PATENT DOCUMENTS

Examine r Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		6,204,275		Friesen et al.	03/20/2001	
		6,245,774		Warrellow et al.	06/12/2001	
		6,297,264		Head et al.	10/02/2001	
	1	5,880,135			3/9/1999	
	2	6,262,040			7/17/2001	
	3	6,040,329			3/21/2000	

FOREIGN PATENT DOCUMENTS

Examine r Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
		FR	2729142	A1	Nadler et al.	07/12/1996		
		EP	1116711	A2	Chassot et al	07/18/2001		
		EP	0994100	A1	Shinji et al.	04/19/2000		
		WIPO	00/71129	A1	Hunt et al	11/30/2000		
		WIPO	94/27971	A1	Nadler et al.	12/08/1994		
		WIPO	93/25517			12/23/1993		
		WIPO	94/14742			07/07/1994		
		WIPO	98/58901			12/30/1998		
		JP	11-189577			07/13/1999		
		WIPO	96/23754			08/08/1996		
		WIPO	99/33806		John et al.	07/1999		
		WIPO	96/36620		Giulio et al	11/1996		
		WO	00/64874			11/2/00		
		WO	01/70738			9/27/01		
		WO	94/02465			2/3/94		
		WO	95/01338			1/12/95		
		JP	2001 11047			1/16/2001		
		WO	02 059110		PCT	8/1/2002		
		WO	97 00868		PCT	1/9/1997		1
		WO	98 09961		PCT	3/12/1998		2
		WO	97 49702		PCT	12/31/1997		3
		WO	00 69841		PCT	11/23/2000		

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

5

Complete if Known

Application Number	10/622,833
Filing Date	July 21, 2003
First Named Inventor	Richard A. SCHUMACHER et al
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-28

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		HEILMAN et al, "Synthesis and Antiinflammatory Evaluation of Substituted Isophthalonitriles, Trimesonitriles, Benzonitriles, and Terephthalonitriles", Journal of Medicinal Chemistry, 1978, Vol. 21, No. 9, pp. 906-913, XP-002226236	
		WATANABE et al, "Structure-Activity Relationship and Rational Design of 3,4-Dephosphatase Inhibitors", Pergamon Tetrahedron, 2000, Vol. 56, pp. 741-752	
		INOUE et al, "Steric Tuning in Chiral Ligand Mediated Enantioselective Alkylation of Imines", Tetrahedron: Asymmetry, 1993, Vol. 4, No. 7, pp. 1603-1606, XP002226237	
		THOMAS C. MCKENZIE et al., "The Gomberg-Bachmann Reaction of Purines", <u>J. Heterocyclic Chem.</u> , May-Jun 1987, pp. 859-861, Vol. 24	
		VASU NAIR et al., "Novel, Stable Congeners of Antiretroviral Compound 2', 3'- Dideoxyadenosine," <u>J. Am. Chem. Soc.</u> , 1989, pp. 8502-8504, Vol. 111	
		VASU NAIR et al., "Synthesis Of Congeners Of Adenosine Resistant To Deamination By Adenosine Deaminase," <u>J. Chem. Soc Comm.</u> , 1989, pp. 878-879	
		JAMES L. KELLEY et al., "Synthesis and Structure- Activity Relationships of 2-Substituted-6-(dimethylamino)- 9-(4-methylbenzyl)-9H-purines with Antirhinovirus Activity," <u>J. Med. Chem.</u> , 1989, pp. 218-224, Vol. 32	
		JAMES E. KELLEY et al., "Antirhinovirus structure-activity relationships of 6-substituted-9-(4-methylbenzyl)-2-trifluoromethyl-9H-purines," <u>Eur. J. Med. Chem.</u> , 1990, pp. 131-135, Vol. 25	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

4

of

5

Complete if Known

Application Number	10/622,833
Filing Date	July 21, 2003
First Named Inventor	Richard A. SCHUMACHER et al
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-28

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		ROGER J. SCHILLING et al., "A High-Throughput Assay For Cyclic Nucleotide Phosphodiesterases," <u>Analytical Biochemistry</u> , 1994, pp.154-158, Vol. 215	
		DONALD V. DANIELS et al., "A Semiautomated Method for the Assay of Cyclic Adenosine 5'-Monophosphate Phosphodiesterase," <u>Analytical Biochemistry</u> , 1996, pp. 367-369, Vol. 236	
		JEAN-JACQUES BOURGUIGNON et al., "9-Benzyladenines: Potent and Selective cAMP Phosphodiesterase Inhibitors," <u>J. Med. Chem.</u> , 1997, pp. 1768-1770, Vol. 40	
		JAMES L. KELLEY et al., "6-(Alkylamino)-9-alkylpurines. A New Class of Potential Antipsychotic Agents," <u>J. Med. Chem.</u> , 1997, pp. 3207-3216, Vol. 40	
		HIROYUKI SAWANISHI et al., "Selective Inhibitors of Cyclic AMP-Specific Phosphodiesterase: Heterocycle-Condensed Purines", <u>J. Med. Chem.</u> , 1997, pp. 3248-3253, Vol. 40	
		J.E. SOUNNES et al., "Proposal for Pharmacologically Distinct Conformers of PDE4 Cyclic AMP Phosphodiesterases", <u>Cell Signal</u> , 1997, pp. 227-236. Vol. 9, No. 3-4	
		MARY ELIZABETH BACH et al., "Age-related defects in spatial memory are correlated with defects in the late phase of hippocampal long term potentiation <i>in vitro</i> and are attenuated by drugs that enhance the cAMP signaling pathway", <u>Proc. Natl. Acad. Sci. USA</u> , April 1999, pp.5280-5285, Vol. 96	
		ELISABETH BOICHOT et al., "Anti-Inflammatory Activities of a New Series of Selective Phosphodiesterase 4 Inhibitors Derived from 9- Benzyladenine," <u>The Journal Of Pharmacology And Experimental Therapeutics</u> , 2000, pp. 647-653, Vol 292, No.2	
		Anil S. GURAM et al., "A Simple Catalytic Method for the conversion of Aryl Bromides to Arylamines," <u>Angew. Chem. Int. Ed. Engl.</u> , 1995, Vol. 34, No. 12, pp. 1348-1350.	
		Michael S. DRIVER et al., "A Second-Generation Catalyst for the Aryl Halide Amination: Mixed Secondary Amines from Aryl Halides and Primary Amines Catalyzed by (DPPF)PdCl ₂ ," <u>J. Am. Chem. Soc.</u> , 1996, Vol. 118, pp. 7217-7218.	
		Takashi EGAWA et al., "Rolipram and its Optical Isomers, Phosphodiesterase 4 Inhibitors, Attenuated the Scopalamine-Induced Impairments of Learning and Memory in Rats," <u>J. Pharmacol.</u> , Vol. 75, 275-281(1997).	
		Peng WANG et al., "Expression, Purification, and Characterization of Human cAMP-Specific Phosphodiesterase (PDE4) Subtypes A, B, C, and D," <u>Biochem. And Biophys. Research Comm.</u> , Vol. 234, 320-324 (1997).	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 5 of 5

Complete if Known

Application Number	10/622,833
Filing Date	July 21, 2003
First Named Inventor	Richard A. SCHUMACHER et al
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-28

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		JAMES E. KELLEY et al., "Antirhinovirus structure-activity relationships of 6-substituted-9-(4-methylbenzyl)-2-trifluoromethyl-9H-purines," <u>Eur. J. Med. Chem.</u> , 1990, pp. 131-135, Vol. 25	
		Domine M. T. CHAN et al., "New N- abd O-Arylations with Phenylboronic Acids and Cupric Acetate," <u>Tetrahedron Letters</u> , Vol. 39, 2933-2936 (1998).	
		Mark BARAD et al., "Rolipram, a Type IV-Specific Phosphodiesterase Inhibitor Facillitates the Establishment of Long-lasting Long-term Potentiation and Improves Memory," <u>Proc. Natl. Acad. Sci.</u> , Vol. 95, pp. 15020-15025 (December 1998).	
		Miles D. HOUSLAY et al., "The Multienzyme PDE4 Cyclic Adenosine Monophosphate-Specific Phosphodiesterase Family: Intracellular Targeting, Regulation, and Selective Inhibition by Compounds Exerting Anti-inflammatory and Antidepressant Actions," <u>Advances in Pharmacology</u> , Vol. 44, pp. 225-342, 1998.	
		John HARTWIG et al., "Room-Temperature Palladium-Catalyzed Amination of Aryl Bromides and Chlorides and Extended Scope of Aromatic C-N Bond Formation with a Commercial Ligand," <u>J. Org. Chem.</u> , 1999, Vol. 64, pp. 5575-5580.	
		Han-Ting ZHANG et al., "Inhibition of Cyclic AMP Phosphodiesterase (PDE4) Reverses Memory Deficits Associated with NDMA Receptor Antagonism," <u>Neuropsychopharmacology</u> , 2000, Vol. 23, pp. 198-204.	
		Han-Ting ZHANG et al., "Effects of Rolipram on Scopolamine-induced Impairment of Working and Reference Memory in the Radial-arm Maze tests in Rats," <u>Psychopharmacology (Berl)</u> 2000 June;150(3):pp. 311-6.	
		T.W. Greene et al., <u>Protective Groups in Organic Synthesis</u> , 3 rd Edition, Chapter 3, "Protection for Phenols and Catechols," pp. 246-292, John Wiley & Sons, 1999	
		International Search Report from PCT Application No. PCT/US02/01508, dated January 16, 2003	

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.